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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/594,071

09/25/2006

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EXAMINER

DEGHAN, QUEENIE S

ART UNIT

PAPER NUMBER

1741

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/594,071	Applicant(s) TOBISAKA ET AL.	
	Examiner QUEENIE DEGHAN	Art Unit 1741	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 October 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-10 and 12-19 is/are pending in the application.
- 4a) Of the above claim(s) 5-10,13 and 14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-4,12,15-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 1, 2010 has been entered.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

1. Claims 1, 3-4, 12, and 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama et al. (2004/0129027) in view of Shimizu (2004/0172976).

Art Unit: 1741

Sugiyama teaches a method for processing a glass base material for optical fiber using an apparatus. The apparatus comprising a pair of rotatable chucks (16) that grasps respective ends of the glass base material (fig. 1, [0022], [0026]) and that are capable of performing relative displacement in an opposing direction (as indicated by arrow in figure 1), a burner for heating the glass base material that is movable along the axial direction as depicted by the arrow on burner (17) in figure 1 ([0022]), and at least one midway holding device (18) in figures 2 and 4 that supports a midway part of the glass base material. Sugiyama further discloses processing the glass base material while preventing the glass base material from being brought into a cantilever state by always supporting the glass base material at two or more points. Sugiyama teaches processing steps such as cutting of the glass base material or attaching of dummy rods at the ends, results in cantilevering one end of the glass rod. This induces a bend in the glass rod and stresses at the chuck holding the cantilevered rod. Sugiyama suggests in these situations, a supporting structure for holding the midway portion of the glass rod should be utilized ([0027], [0028], [0036], [0037], figures 1, 4). Shimizu also teaches a similar process for glass rod comprising supporting a glass rod on a pair of rotatable chucks and traversing burner for heating the glass rod along the axial direction ([0039]). Like Sugiyama, Shimizu teaches such a configuration can be utilized for known process such as attaching dummy rods, severing of the glass rod, or elongating the glass rod ([0059], [0060], [0071], figures 5a-e). Shimizu teaches elongating the glass rod by supporting the glass rod at two points by chucks at both ends of the glass rod and moving the burner and chuck so as to heat and elongate the glass base material (figure

Art Unit: 1741

5B, [0064]). Shimizu demonstrates the elongation process can be performed without the assistance of a midway holding device. Performing an elongation process in the apparatus of Sugiyama would suggest moving the holding devices aside to the vicinity of the chucks so as to not hold the midway part of the glass rod, since the glass rod is already supported at two points at the ends. Because the glass rod does not experience a cantilever state in an elongation process, there would be no reason to utilize the midway holding device during elongation, as suggested by Sugiyama.

Sugiyama recognizes the device can be used to perform other processes ([0037]).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention to have similarly performed the elongation step of Shimizu in the process of Sugiyama, wherein the midway holding devices are moved aside so as to not support the glass rod at the midway part, as both Sugiyama and Shimizu employs similar apparatus features and elongation is a well known process for preparing a glass rod with a desired diameter.

2. Regarding claim 3, at least one of the two points at which the glass base material is supported is at the midway part of the glass material, as can be seen in figures 2 & 4.

3. Regarding claims 4 and 12, the glass base material is held at two midway parts (figure 4).

4. Regarding claim 15, Sugiyama discloses utilizing the apparatus for other processes that requires supporting the glass preform such as a welding process for attaching dummy glass rods to elongate the glass preform ([0037]).

Art Unit: 1741

5. Regarding claims 16-18, as mentioned above, both Sugiyama and Shimizu teaches other processes involving the heating of a glass rod mounted on a horizontal lathe and held by chucks at either ends. Sugiyama discloses utilizing the apparatus for other processes that requires supporting the glass preform in a horizontal lathe such as a welding process for attaching dummy glass rods to elongate the glass preform ([0037]). Shimizu also teaches utilizing the apparatus for welding of dummy rods, elongating the glass rod, flame polishing, and spindle shaping by flame cutting ([0059]-[0073]). As discussed above, since spindle shaping results in one end of the glass rod to be cut, then it would have been obvious to one of ordinary skill in the art at the time of the invention to have used the apparatus of Sugiyama comprising the holding device for the spindle shaping process of Shimizu as this process results in one end of the glass rod to be in a cantilevered state, which would require support at that end to prevent bending of the glass rod.

6. In further regards with claim 18, a similarly discussion above regarding the elongation process can be applied. Since the glass rod is already supported at two points at the end by chucks, and the glass rod does not result in a cantilevered state, then the midway holding devices would be appropriately moved aside to the vicinity of the chucks, allowing for the burner to traverse for the flame polishing step. Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention to have expected the holding device of Sugiyama to be at ends of the glass base material, such as at the vicinity of the chucks, since support of the glass base material would not be expected because the rod is already supported at both ends.

Art Unit: 1741

7. Regarding claim 19, Sugiyama discloses a movable headstock (15) comprising a rotatable chuck and that moves along the axial direction of the glass base material ([0022], [0026]). Sugiyama also discloses the holding device (18) is movable along an axial direction of the glass base material and it appears to be independent from the movement of the headstock ([0028], [0022]).

Response to Arguments

8. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to QUEENIE DEGHAN whose telephone number is (571)272-8209. The examiner can normally be reached on Monday through Friday 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Daniels can be reached on 571-272-2450. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1741

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Queenie Dehghan/
Primary Examiner, Art Unit 1741